

Testimony for the Nebraska Credential Review regarding Dialysis Technicians

Leslie Spry, MD FACP FASN FNKF

Dialysis Center of Lincoln

Lincoln Nephrology & Hypertension

The training, duties and job description of Dialysis Technicians have evolved over a long period of time. Physicians were the first professionals to perform dialysis treatments. The treatments were often complex and required cannulation of arterial vessels and venous access. The access typically involved surgical cut-down on the vessels with placement of cannulas in the vessels of the arm or leg. These cannulas were then connected to early dialysis machines for extended periods of time and required the constant attendance of physicians and technicians in order to accomplish the 8 to 12 hour procedures that were performed intermittently. Nursing staff performed patient care functions but were not involved in the actual cannulas until the advent of the Scribner shunt cannula in the early 60's. This was followed in 1966 by the publication of a technique for creating a surgical arteriovenous (AV) fistula by Drs. Cimino and Brescia. Initially, each cannulation was performed by a physician and then technicians were used to maintain the connection. Nursing staff then learned the technique and started cannulating AV fistulas. Physicians were required to declot the Scribner shunt or the AV fistula when clots stopped the function of the access. Early dialysis was truly a very complex task.

The National Kidney Foundation first appointed a Task Force to review public policy and make recommendations concerning job descriptions for Dialysis Technicians in 1990. The report and publication of the Task Force recommendations regarding Dialysis Technicians occurred in 1993. That publication described a Dialysis Technician as: "a patient care technician role description outline that defined a person who performs safe, effective, and adequate hemodialysis treatments." The article went on to outline the training and duties of a Dialysis Technician as:

Role Description:

Dialysis technicians function in multiple roles, which include dialyzer reprocessing, equipment maintenance and repair, water treatment monitoring, participation in quality improvement, vascular access monitoring and direct patient care.

Certified hemodialysis technicians are the primary direct care giver for patients undergoing dialysis treatments. They work closely with, and under the direct supervision of, registered nurses as an important member of the patient care team. Through primarily on the job training, a certified hemodialysis technician must learn and understand the scientific principles of dialysis, the process of the dialysis treatment, and how to respond to the physical and emotional needs of people undergoing dialysis treatments.

Qualifications:

- High school diploma or equivalency
- Successful achievement of certification within 18 months of hire

Experience:

Courses in basic sciences; previous health care experience (such as Certified Nurse's Aide or medical technician/technologist)

Educational and Training Opportunities:

Training opportunities may include on-the-job training, employer-sponsored training programs, or vocational schools/community college programs.

Certification in nephrology technology is offered to those technicians/technologists meeting the necessary requirements to sit for the exam. For more information on organizations offering certification click on the following links:

- **Board of Nephrology Examiners - Nursing - Technology (BONENT)**
- **National Nephrology Certification Organization (NNCO)**
- **The Nephrology Nursing Certification Commission (NNCC)**

Work Setting:

Dialysis technicians are employed in dialysis facilities located in hospitals and out-patient facilities, as well as home dialysis programs or industry.

Reporting Relationship:

In most dialysis facilities, the certified hemodialysis technician is the staff person who is primarily responsible for performing the actual dialysis treatment, while the nurse is responsible for the overall care of the patient. The technician works under direct supervision of the registered nurse, who is responsible for making decisions and providing guidance any time the treatment varies from normal parameters or the patient's condition becomes unstable.

Duties/Tasks:

The list below is general, and may vary based on different state laws and facility policies.

- Assembles necessary supplies
- Prepares dialysate according to established procedures and the dialysis prescription
- Assembles and prepares the dialysis extracorporeal circuit according to protocol and dialysis prescription.
- Verifies absence of residual sterilants.
- Tests monitors and machine functions, including alarms, conductivity and temperature. Sets monitors and alarms according to unit and manufacturer protocols.
- Obtains and documents pre-dialysis vital signs, weight, and temperature.
- Inspects a patient's dialysis access. Administers local anesthesia, inserts needles, and initiates dialysis according to unit protocol and patient prescription.
- Documents treatment parameters and communicates patient condition and issues to Registered Nurse.
- Administers anticoagulant according to unit protocols and prescription.
- Measures and adjusts blood flow rates according to established protocols and prescription.
- Calculates and adjusts fluid removal rates according to established protocols and prescription.
- Monitors patients and equipment, responds to alarms, and readjusts treatment parameters as defined by established protocols and individual patient requirements.
- Changes fluid removal rate and patient position, and administers replacement saline as directed by the registered nurse, physician order, or unit protocol.
- Responds appropriately to dialysis-related emergencies such as hypotensive episodes, needle displacement or infiltration, clotting episodes, blood leaks, air emboli, etc. Initiates cardiopulmonary resuscitation (CPR) in the event of a cardiac arrest.
- Discontinues dialysis and establishes hemostasis following unit protocol. Inspects, cleans, and dresses access according to unit protocol.
- Obtains and records post-dialysis vital signs, temperature, and weight.
- Discards dialysis supplies and sanitizes equipment according to manufacturer and unit protocol.

- Communicates emotional, medical, psychosocial, and nutritional concerns to the registered nurse.
- Maintains professional conduct, good communication skills, and confidentiality in the care of patients. Participates in the multidisciplinary process.
- Collaborates with the registered nurse in identifying and meeting patient education goals.

The article can be found at: [http://www.ajkd.org/article/S0272-6386\(12\)81099-7/pdf](http://www.ajkd.org/article/S0272-6386(12)81099-7/pdf)

The Centers for Medicaid and Medicare Services (CMS) next published the Conditions for Coverage of Dialysis Facilities in the United States on April 15, 2008 in the Federal Register. This document can be found at: <https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/Downloads/ESRDfinalrule0415.pdf>

On Page 51 of that document, training and duties of the Dialysis Technician was first published. This notified all State Surveyors of the standards to which Dialysis Technicians would be held. This document required that Dialysis Technicians be certified by one of the three organizations mentioned above and that this certification must be accomplished within 18 months of hire after appropriate training under the supervision of the Medical Director and Registered Nursing staff. This was supported by all major nephrology and volunteer patient organizations at the time.

There has never been a report of injury or malpractice as the result of an action by a Dialysis Technician. According to 71-6221 of the Uniform Credentialing Act, regulation of a health profession should only be required when unregulated practice poses clear “harm or may endanger the health, safety or welfare of the public and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument”. I would pose to you that this requirement has not be met.

71-6221. Regulation of health profession; change in scope of practice; when. (1) After January 1, 1985, a health profession shall be regulated by the state only when: (a) Unregulated practice can clearly harm or endanger the health, safety, or welfare of the public and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument; (b) Regulation of the profession does not impose significant new economic hardship on the public, significantly diminish the supply of qualified practitioners, or otherwise create barriers to service that are not consistent with the public welfare and interest; (c) The public needs, and can reasonably be expected to benefit from, assurance of initial and continuing professional ability by the state; and (d) The public cannot be effectively protected by other means in a more cost-effective manner. (2) If it is determined that practitioners of a health profession not currently regulated are prohibited from the full practice of their profession in Nebraska, then the following criteria shall be used to determine whether regulation is necessary: (a) Absence of a separate regulated profession creates a situation of harm or danger to the health, safety, or welfare of the public and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument; (b) Creation of a separate regulated profession would not create a significant new danger to the health, safety, or welfare of the public; (c) Creation of a separate regulated profession would benefit the health, safety, or welfare of

the public; and (d) The public cannot be effectively protected by other means in a more cost-effective manner.

(3) After March 18, 1988, the scope of practice of a regulated health profession shall be changed only when: (a) The present scope of practice or limitations on the scope of practice create a situation of harm or danger to the health, safety, or welfare of the public and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument; (b) The proposed change in scope of practice does not create a significant new danger to the health, safety, or welfare of the public; (c) Enactment of the proposed change in scope of practice would benefit the health, safety, or welfare of the public; and (d) The public cannot be effectively protected by other means in a more cost-effective manner. (4) The Division of Public Health shall, by rule and regulation, establish standards for the application of each criterion which shall be used by the review bodies in recommending whether proposals for credentialing or change in scope of practice meet the criteria. Source: Laws 1985, LB 407, § 21; Laws 1988, LB 384, § 7; Laws 1996, LB 1044, § 759; Laws 2007, LB296, § 653. Operative date July 1, 2007.

According to 71-6222 of the Uniform Credentialing Act, the “least restrictive alternative method of regulation shall be implemented, consistent with the public interest” and may include regulation by other than direct credentialing of the health profession, registration, certification, or licensure.

71-6222. Least restrictive method of regulation; how implemented. After evaluating the criteria in sections 71-6221 to 71-6223 and considering governmental and societal costs and benefits, if the Legislature finds that it is necessary to regulate a health profession not previously regulated by law, the least restrictive alternative method of regulation shall be implemented, consistent with the public interest and this section, as follows: (1) When the threat to the public health, safety, welfare, or economic well-being is relatively small, regulation shall be by means other than direct credentialing of the health profession. Such regulation may include, but shall not be limited to: (a) Inspection requirements; (b) Enabling an appropriate state agency to bring an end to a harmful practice by injunctive relief in court; (c) Regulating the business activity or entity providing the service rather than the employees of the business or entity; or (d) Regulating or modifying the regulation of the health profession supervising or responsible for the service being performed; (2) When there exists a diversity of approaches, methods, and theories by which services may be rendered and when the right of the consumer to choose freely among such options is considered to be of equal importance with the need to protect the public from harm, the regulation shall implement a system of registration; (3) When the consumer may have a substantial basis for relying on the services of a practitioner, the regulation shall implement a system of certification; or (4) When it is apparent that adequate regulation cannot be achieved by means other than licensing, the regulation shall implement a system of licensing. Source: Laws 1985, LB 407, § 22; Laws 1988, LB 384, § 8.

I would submit that given the training and certification of Dialysis Technicians, that certification and licensure do not fit with the definition. Dialysis Technicians require only a High School diploma to be hired as a Dialysis Technician. In addition, it takes 18 months of on-the-job training to take the National Certification Examination before they are certified as a Dialysis Technician. Hence, if any regulation is to

occur, the only regulation that fits the definition would be registration, and even this requires that two separate registrations would need to occur. One when the person is hired and one when the person passes the certifying examination.

Hence, while I am aware that the applicant group has modified their proposal to licensure rather than registration, I am at a loss to suggest how we could require licensure upon hire of a High School graduate and then change that licensure to reflect on-the-job training and national certification.

Finally, I would ask that the committee actually view the routine that is dialysis. I realize that the description that you have received has raised the question of complex medical tasks, those tasks are supervised by licensed personnel and are very routine from treatment to treatment. Each task has been prescribed by a physician for STABLE dialysis patients in an outpatient setting. I continue to feel that the committee has been jaded by misconceptions and speculation about dialysis patients in the hospital or acute care setting and have not considered the actual events that occur in an outpatient dialysis unit. I would be happy to bring the committee to my units and show them the excellent care provided by all of the staff at our dialysis unit.

A handwritten signature in black ink, reading "Leslie Spry" followed by a stylized flourish.

Leslie Spry, MD FACP FASN FNKF